



# SUPPLIER QUALITY MANUAL





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## ***INTRODUCTION***

In today's lean, just-in-time manufacturing environment, product found to be nonconforming can cause serious manufacturing disruptions. In our continuing efforts to improve communication with our Suppliers, IMT has created this Supplier Quality Manual (SQM) which has been designed to communicate and describe IMT's priorities, requirements and expectations for our Suppliers regarding product Quality Assurance.

IMT's SQM is a supplement to and does not replace or alter conditions covered by the purchase agreement. It is to be considered as a description of the lowest level of quality assurance that IMT expects from its suppliers. Compliance with IMT's SQM is expected from all of IMT's suppliers.

## ***QUALITY REQUIREMENTS***

IMT's quality requirements stated in this SQM are general in nature. Quality requirements for specific parts are specified in product specifications and order documents (purchase orders, drawings, purchase specifications, work instructions, inspection worksheets etc.).

Suppliers that can provide confirmation of having an established quality management system in place (i.e.: ISO, TS etc.) are considered "preferred suppliers" and are acceptable for immediate use.

Suppliers that are NOT able to supply a current quality management certificate may still be utilized; however, they may be subjected to an increased level of supplier monitoring.

## ***STATUTORY & REGULATORY REQUIREMENTS***

IMT requires its suppliers to be in compliance with all applicable statutory and regulatory requirements.

## ***CONTROLLED GOODS REGISTERED SUPPLIERS***

Due to the sensitive nature of many of IMT's products, it may be required for suppliers to be Controlled Goods registered. Canada's Defence Production Act requires that contracts that involve Controlled Goods be sourced to Suppliers that are Controlled Goods Registered prior to being permitted to manufacture, examine, possess or transfer controlled goods as part of their contractual requirements with IMT. A complete listing of Controlled Goods is outlined in "A Guide to Canada's Export Controls" published by Foreign Affairs and International Trade Canada. While not all products at IMT are considered Controlled Goods, it is strongly recommended that IMT's suppliers consider registration.



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## ***SAMPLE SUBMISSIONS***

Suppliers will be provided with an IMT Sample Submission Checklist (FRMPU004) upon awarding the supplier with the quoted contract. Unless otherwise waived internally, the following are the MINIMUM requirements for a standard sample submission:

- **ENGINEERING DRAWING** – A copy of the product drawing must be included with each submission to confirm that the supplier is working to the correct revision. The drawing should also be ballooned with each characteristic numbered to correlate with the dimensional layout.
- **DIMENSIONAL LAYOUT** - A full dimensional layout of at least one (1) piece from each process, mould, pattern, cavity or die is required to confirm that the supplier is capable of manufacturing the part(s) to print. Each characteristic on the layout should be numbered to correlate with the ballooned/numbered characteristics on the engineering product drawing.
- **SAMPLE PRODUCT** - At least one (1) part from each process, mould, pattern, cavity or die is required to be submitted for evaluation. Sample parts are to be made to IMT supplied drawings and engineering specifications from specified materials on the intended production tooling. No operations are to be included which are not part of the defined production process. The samples provided should be the parts that were measured to satisfy the dimensional layout requirements for the submission.
- **MATERIAL CERTIFICATION & PERFORMANCE VALIDATION** - A material certification must be included as part of the sample submission to confirm chemical, physical and/or metallurgical requirements as defined on the engineering drawing or specification. When performance test requirements such as tensile, cycle, salt spray, paint, functional, etc. are specified, the supplier shall have these tests performed by a qualified laboratory.

Some contracts may also require the following additional information to be included as part of a supplier's sample submission:

- **PRODUCTION GAUGING METHOD / FREQUENCY** – As the supplier you may be required to provide IMT with a brief outline of the proposed gauging method and frequency (i.e.: Quality / Control Plan). No formalized format is required; however, this information is required to confirm that the supplier has a defined / controlled process that will be followed during manufacture.
- **CAPABILITY STUDY** – Capability data for product characteristics that are identified as Critical or Significant may be required for some contracts. If required, a Ppk of 1.67 is required for these characteristics. Should the manufacturing process not be capable of meeting the Ppk requirement for these characteristics, 100% inspection is required.



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## ***SAMPLE SUBMISSION RESPONSIBILITIES***

It is the supplier's responsibility to provide IMT with a new sample submission when any of the following conditions occur:

- Existing tooling is transferred to a new plant location
- Additional tooling is constructed for use
- Parts are produced at more than one of the suppliers plan locations. Samples from each location are required.
- A significant change in the method of manufacture; such as use of alternate or additional machining centers
- Subcontractors source is changed
- Supplier changes to an optional type of construction or material
- IMT Engineering drawing is updated (revision change)
- Parts have not been produced for more than a 12 month period.

## ***CALIBRATION OF GAUGING***

Unless otherwise contractually agreed, it is the supplier's responsibility to provide gauges for the adequate monitoring of product quality. These gauges are to be provided, maintained and calibrated at the supplier's expense.

Where it is contractually agreed that gauging is to be supplied by IMT, IMT will ensure that all agreed upon gauges are inspected, calibrated and in good working order prior to delivery. Upon receipt, it is expected that the supplier maintains the gauges in a good state of repair and ensures that they are calibrated at defined intervals to ensure ongoing compliance with product requirements. These gauges remain the property of IMT; as such, any gauges that are lost or damaged are to be replaced at the supplier's expense.

## ***IMT SUPPLIED PROPERTY***

The supplier shall exercise care with IMT property while it is under the supplier's control or being used. The supplier must identify, verify, protect and safeguard IMT's property. If any property is lost, damaged or otherwise found to be unsuitable for use, the supplier must report their findings to IMT. Any IMT property that is lost or damaged is to be repaired or replaced at the supplier's expense.



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## ***NONCONFORMITIES IN PRODUCT***

When a nonconformance in product or process is detected at the supplier's facility, the supplier is expected to determine the extent of the concern and take immediate action to prevent shipment of any nonconforming material. All suspect material shall be handled and contained as nonconforming material. The supplier **MUST** notify IMT of any suspected quality problems in shipped products and the action being taken to eliminate the condition for future shipments. If the problem cannot be corrected, shipments must be held pending specific instructions from IMT.

## ***CORRECTIVE ACTION REQUESTS***

In the event that IMT receives nonconforming product from its suppliers a formal request for a corrective action may be issued. Once issued, it is expected that the supplier perform a review, determine the cause of the concern and implement effective counter-measures (corrective actions) to address the immediate issue and prevent future recurrence. The actions taken are to be formally documented on either IMT's corrective action form or similar method used by the supplier. Unless otherwise stated, a complete response detailing the permanent corrective action is expected within thirty (30) days from the date of issue. The provision of a thorough / timely response will be taken into consideration when awarding future contracts.

## ***DEVIATIONS***

If a deviation is desired, the supplier must notify IMT of the deviated specifications and obtain written approval prior to shipment. Under no circumstances should a supplier knowingly ship nonconforming product to IMT without first gaining formal documented approval in the form of an approved deviation.

## ***PURCHASING DATA***

IMT's Buyers will provide the supplier with all applicable documentation along with the "Supplier / Subcontractor Confirmation Receipt of IMT Drawings/Specifications" (FRMPU016) which shall be signed and returned to IMT as written consent that the supplier has received the desired documentation and is working to the latest and greatest revision provided by IMT.

## ***SUPPLIER AUDITS / ASSESSMENTS***

A supplier assessment is performed in order to grade the potential supplier's capability of delivering the requested parts and/or services. Depending on the type of business, IMT can do this assessment during a visit at the supplier's site or by reviewing the Supplier Self Certification Questionnaire, through a supplier self assessment.



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## ***PACKAGING / PRESERVATION OF PRODUCT***

Unless contractually provided by IMT, Suppliers shall develop procedures to ensure handling, storage; packaging and shipping of material are in a manner to ensure that it meets all functional and appearance specifications upon arrival at IMT.

Material may be rejected at IMT incoming inspection due to damaged or incorrect packaging if the packaging is not adequate to protect the material during handling and storage at IMT.

All package labels must be positioned in a manner that allows the package labels to be read without rearranging the material.

Under no circumstances is it acceptable for a supplier to return known nonconforming product in the same container mixed with acceptable product. All nonconforming parts (if returned) should be packaged separately and clearly labeled.

## ***PRODUCT LABELLING – IDENTIFICATION/TRACEABILITY***

Suppliers shall ensure that all products are identified according to print and/or purchase order specifications. If requested by IMT, suppliers shall utilize an effective system, such as unique lot numbers, to maintain lot traceability to material.

## ***INSPECTIONS***

The supplier shall maintain procedures to ensure that product conforms to and is certified to the specified requirements. Most products require documented process inspections and/or final inspections based upon the supplier's internal quality management system or by completion of inspection sheets provided by IMT.

## ***DELIVERY***

It is expected that all IMT suppliers provide product that is delivered 100% on-time with all appropriate documentation (material certifications, inspection reports etc.) with each shipment. Product may be rejected at incoming inspection if appropriate documentation is not provided with product. If a supplier is aware that any delivery may be late, proactive notification to IMT is required.